

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/601,226	BOHRER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kwang B. Yao	2667	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 10/27/04.
2. ☒ The allowed claim(s) is/are 11-17,19,21, renumbered 1-9, respectively.
3. ☒ The drawings filed on 10/27/04 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

### **REASONS FOR ALLOWANCE**

1. The following is an examiner's statement of reasons for allowance:

The present invention is directed to a method and a system for communication among equal-access stations of a ring-shaped, serial fiber-optic bus. Each independent claim identifies the uniquely distinct features: regarding claim 1 (originally filed claim 11), during one bus cycle, a predetermined one of the stations generating strictly time-cyclical container messages, addressing the container messages, and supplying the container messages to the bus, the predetermined one of the stations supplying a synchronization message to the bus as an end message of the bus cycle; each one of the stations writing respective data in the container messages addressed to the one of the stations; each one of the stations reading data of written-in container messages on the serial bus as a function of a read authorization of the one of the stations; each one of the stations communicating only with the bus, due to source addressing of the written respective data and each one of the stations having direct-access read authorization of the respective data written by each one of the stations; each one of the stations reading the synchronization message and generating a respective interrupt as a function of the synchronization message, wherein depending on a respective position of each one of the stations, the respective interrupt being time delayed so that all of the respective interrupts are output in a time-synchronous manner; and further processing the read data when the respective interrupts are output; regarding claim 7 (originally filed claim 17), wherein the read write memory has stored thereon a communications controller comprising a task table that includes a number of messages to be sent in a bus cycle by the dispatcher station, an address and channel number as a subaddress of each station, and addresses of blank message; and special messages to be used to

Art Unit: 2667

fill up the bus cycle between the last generated addressed message and the synchronization message; regarding claim 9 (originally filed claim 21), wherein the each interface module includes a read write memory that has stored thereon a communications controller comprising a task table that includes a number of messages to be sent in a bus cycle by the dispatcher station, ;an address and channel number as a subaddress of each station, and addresses of blank messages and special messages to be used to fill up the bus cycle between the last generated addressed message and the synchronization message. The closest prior art, Holmberg et al. (US 4982185), Sakurai et al. (US 4847613) and Gotze et al. (US 5941966) disclose conventional communication systems, either singularly or in combination, fail to anticipate or render the above features obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 571-272-3182. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2667

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Kwang B. Yao', with a long horizontal flourish extending to the right.

Kwang B. Yao  
September 16, 2005